

Title (en)

Master cylinder having a hydraulical reactiondevice and brake system having such a master cylinder

Title (de)

Hauptzylinder mit einem hydraulischen Reaktionsvorrichtung und Bremssystem mit einem derartigen Hauptzylinder

Title (fr)

Maître-cylindre à dispositif de réaction hydraulique et ensemble de freinage comportant un tel maître-cylindre

Publication

EP 1616767 A1 20060118 (FR)

Application

EP 05014857 A 20050708

Priority

FR 0407954 A 20040713

Abstract (en)

The cylinder has a braking assisting device retransmitting characteristic action of a braking level to a control rod, and including an actuating piston (6) mounted in a primary piston (5). The device has a connecting piston (36), in the form of bush, tightly mounted around a part of the piston (6) and in a bore of the piston (5). A backlash spring permits to create backlash in the beginning of a braking phase. The piston's (5) annular face (34) permits to block the force of hydraulic actuating pistons on a distributor-plunger. A return spring (50) defines a part of changing threshold of control ratio. An independent claim is also included for a braking assembly including a master cylinder and a pneumatic braking assistance servomotor.

IPC 8 full level

B60T 11/10 (2006.01); **B60T 13/569** (2006.01); **B60T 13/573** (2006.01)

CPC (source: EP)

B60T 11/10 (2013.01); **B60T 13/569** (2013.01); **B60T 13/573** (2013.01)

Citation (applicant)

- WO 03099623 A1 20031204 - LUCAS AUTOMOTIVE GMBH [DE], et al
- FR 2856363 A1 20041224 - BOSCH GMBH ROBERT [DE]

Citation (search report)

- [DA] WO 03099623 A1 20031204 - LUCAS AUTOMOTIVE GMBH [DE], et al
- [A] US 6085522 A 20000711 - SIMON BACARDIT JUAN [FR]
- [A] US 6209441 B1 20010403 - TAKAKU HITOSHI [JP], et al

Designated contracting state (EPC)

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EP 1616767 A1 20060118; **EP 1616767 B1 20070725**; AT E367953 T1 20070815; DE 602005001728 D1 20070906; DE 602005001728 T2 20080605; ES 2290828 T3 20080216; FR 2873082 A1 20060120; FR 2873082 B1 20080111

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